

larger than the rest, occupy the median radial line, and the other paxillæ form series parallel to this and more widely spaced; only the median series extending along the outer fifth of the ray. Throughout the ray, except at the extreme base, the intermediate paxillar area is distinctly narrower than the breadth of the supero-marginal plates. The primary embryonic apical plates are discernible, and are rather larger than the other plates. Several series of rather smaller intermediate paxillæ intervene between the cycle of basal plates and the dorso-central plate, which is rather small and inconspicuous; the periproctal aperture lies external to this. The paxillæ decrease in size as they recede from the neighbourhood of the primary plates and approach the margin and extremity of the rays. The paxillæ consist of fifteen to twenty short, truncate, polygonal granules, rather well spaced, borne on the tabulum, and often with numerous much smaller cilia-like spinelets appearing at the periphery. In the series of paxillæ forming the median radial line, the short sides of the paxillæ which form the adoral and aboral extremities always have a small series of these cilia-like spinelets directed towards the corresponding set of the adjacent plate, guarding like comb-formed pedicellariæ the little spaces between adjacent plates mentioned above. The madreporiform body is small and slightly sunken; it is subtriangular in outline, and lies external to its adjacent basal plate (paxilla), the area of which is somewhat larger. Its position is about midway between the centre of the disk and the inner margin of the supero-marginal plates.

The marginal plates form a uniformly rounded lateral wall to the disk and rays, and present the appearance, when seen from above, of a broad well-defined marginal border, which is especially emphasised in consequence of the whole intermediate paxillar area being sunken below the level of the supero-marginal plates. The central area of the disk is slightly inflated and convex. The supero-marginal plates are thirty-one in number from the median interradiial line to the extremity; and are greater both in breadth and height than in length. The actual height of the innermost plates in the interbrachial angle is nearly twice the length, but the measurement along the surface of curvature,—i.e., the dimension at right angles to the line of length is approximately proportional to the length as five to two. The succeeding plates are a little longer than the foregoing, and their height is rather less; but they decrease as they proceed along the ray, and the relative proportions of length, height, and breadth also become less. All the plates are slightly convex along their median line perpendicular to the axis of the ray. The supero-marginal plates bear no spines, but are covered with rather widely spaced, large, semiglobular, semi-transparent granules which diminish in size near the margins of the plate, a subregular lineal series of small granules standing at the lateral margins. The odd terminal plate is small and shield-shaped; and the tip of the ray is slightly curved upward.

The infero-marginal plates are thirty in number, and although they approximately agree in length with the companion plates of the superior series the divisional sutures are not always directly sub-imposed. The infero-marginal plates bear no spines, but are